



EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Angela"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Elliott-Santos"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Manzanita Tribal Chairwoman"/>					
Complete Address:						
Street1:	<input type="text" value="6 Old Mine Road"/>					
Street2:	<input type="text" value="P.O. Box 1302"/>					
City:	<input type="text" value="Boulevard"/>	State:	<input type="text" value="CA: California"/>			
Zip / Postal Code:	<input type="text" value="91905-0000"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="619-766-4930"/>	Fax Number:	<input type="text"/>			
E-mail Address:	<input type="text" value="Ex. 6 Personal Privacy (PP)"/>					

Payee: *Individual authorized to accept payments.*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Veronica"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Roblado"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Manzanita Financial Director"/>					
Complete Address:						
Street1:	<input type="text" value="6 Old Mine Road"/>					
Street2:	<input type="text" value="P.O. Box 1302"/>					
City:	<input type="text" value="Boulevard"/>	State:	<input type="text" value="CA: California"/>			
Zip / Postal Code:	<input type="text" value="91905-0000"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="619-766-4930"/>	Fax Number:	<input type="text"/>			
E-mail Address:	<input type="text" value="Ex. 6 Personal Privacy (PP)"/>					

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="John"/>	Middle Name:	<input type="text" value="Eagle-Spirit"/>
	Last Name:	<input type="text" value="Elliott"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Manzanita Tribal Administrator"/>					
Complete Address:						
Street1:	<input type="text" value="6 Old Mine Road"/>					
Street2:	<input type="text" value="P.O. Box 1302"/>					
City:	<input type="text" value="Boulevard"/>	State:	<input type="text" value="CA: California"/>			
Zip / Postal Code:	<input type="text" value="91905-0000"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="619-766-4930"/>	Fax Number:	<input type="text"/>			
E-mail Address:	<input type="text" value="Ex. 6 Personal Privacy (PP)"/>					

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: **Prefix:** **First Name:** **Middle Name:**
Last Name: **Suffix:**
Title:

Complete Address:

Street1:
Street2:
City: **State:**
Zip / Postal Code: **Country:**
Phone Number: **Fax Number:**
E-mail Address:

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name:

Address:

City:

State: Zip Code:

B. DUNS No.

II. Is the applicant currently receiving EPA Assistance? ☒ Yes ☐ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

N/A

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

N/A

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

N/A

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R. 5.140 and 7.95)

☒ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing?

☐ Yes ☒ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?

☒ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator?

☒ Yes ☐ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))

☒ Yes ☐ No

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)

☐ Yes ☒ No

- X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.**

N/A

- XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.**

N/A

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official

ANGELA Elliott Santos

B. Title of Authorized Official

Manzanita Tribal Chairwoman

C. Date

03/23/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. *Signature of Authorized EPA Official

B. Title of Authorized Official

C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

Other Attachment File(s)

* Mandatory Other Attachment Filename:

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To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment

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BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. USEPA Enhanced Air Quality	66.034	\$	\$	229,072.00	\$	229,072.00
2.						
3.						
4.						
5. Totals		\$	\$	229,072.00	\$	229,072.00

Standard Form 424A (Rev. 7-97)
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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	USEPA Enhanced Air Quality				
a. Personnel	\$ 27,612.00	\$	\$	\$	\$ 27,612.00
b. Fringe Benefits	2,810.00				2,810.00
c. Travel	0.00				0.00
d. Equipment	0.00				0.00
e. Supplies	17,016.00				17,016.00
f. Contractual	144,190.00				144,190.00
g. Construction	0.00				0.00
h. Other	0.00				0.00
i. Total Direct Charges (sum of 6a-6h)	191,628.00				\$ 191,628.00
j. Indirect Charges	37,444.00				\$ 37,444.00
k. TOTALS (sum of 6i and 6j)	\$ 229,072.00	\$	\$	\$	\$ 229,072.00
7. Program Income	\$ 0.00	\$	\$	\$	\$ 0.00

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	USEPA Enhanced Air Quality	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
9.					
10.					
11.					
12. TOTAL (sum of lines 8-11)		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 165,677.00	\$ 73,773.00	\$ 30,635.00	\$ 30,635.00	\$ 30,634.00
14. Non-Federal	\$				
15. TOTAL (sum of lines 13 and 14)	\$ 165,677.00	\$ 73,773.00	\$ 30,635.00	\$ 30,635.00	\$ 30,634.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	USEPA Enhanced Air Quality	\$ 69,395.00	\$	\$	\$
17.					
18.					
19.					
20. TOTAL (sum of lines 16 - 19)		\$ 69,395.00	\$	\$	\$

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: \$191,628.00	22. Indirect Charges: \$37,444.00
23. Remarks: N/A	

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Project Narrative File(s)

* **Mandatory Project Narrative File Filename:**

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To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File

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Application for Federal Assistance SF-424

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application		* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision		* If Revision, select appropriate letter(s): <div style="border: 1px solid black; height: 15px; width: 100%;"></div> * Other (Specify): <div style="border: 1px solid black; height: 15px; width: 100%;"></div>	
* 3. Date Received: <div style="border: 1px solid black; padding: 2px;">03/23/2022</div>		4. Applicant Identifier: <div style="border: 1px solid black; height: 15px; width: 100%;"></div>			
5a. Federal Entity Identifier: <div style="border: 1px solid black; height: 15px; width: 100%;"></div>			5b. Federal Award Identifier: <div style="border: 1px solid black; height: 15px; width: 100%;"></div>		
State Use Only:					
6. Date Received by State: <div style="border: 1px solid black; width: 100px;"></div>		7. State Application Identifier: <div style="border: 1px solid black; width: 200px;"></div>			
8. APPLICANT INFORMATION:					
* a. Legal Name: <div style="border: 1px solid black; padding: 2px;">Manzanita Band of Diegueno Mission Indians</div>					
* b. Employer/Taxpayer Identification Number (EIN/TIN): <div style="border: 1px solid black; padding: 2px;">95-3126854</div>			* c. Organizational DUNS: <div style="border: 1px solid black; padding: 2px;">9473291650000</div>		
d. Address:					
* Street1:		<div style="border: 1px solid black; padding: 2px;">6 Old Mine Road</div>			
Street2:		<div style="border: 1px solid black; padding: 2px;">P.O. Box 1302</div>			
* City:		<div style="border: 1px solid black; padding: 2px;">Boulevard</div>			
County/Parish:		<div style="border: 1px solid black; height: 15px; width: 100%;"></div>			
* State:		<div style="border: 1px solid black; padding: 2px;">CA: California</div>			
Province:		<div style="border: 1px solid black; height: 15px; width: 100%;"></div>			
* Country:		<div style="border: 1px solid black; padding: 2px;">USA: UNITED STATES</div>			
* Zip / Postal Code:		<div style="border: 1px solid black; padding: 2px;">91905-0000</div>			
e. Organizational Unit:					
Department Name: <div style="border: 1px solid black; padding: 2px;">Tribal Government</div>			Division Name: <div style="border: 1px solid black; height: 15px; width: 100%;"></div>		
f. Name and contact information of person to be contacted on matters involving this application:					
Prefix: <div style="border: 1px solid black; width: 100px;"></div>		* First Name: <div style="border: 1px solid black; padding: 2px;">Angela</div>			
Middle Name: <div style="border: 1px solid black; width: 150px;"></div>					
* Last Name:		<div style="border: 1px solid black; padding: 2px;">Elliott-Santos</div>			
Suffix: <div style="border: 1px solid black; width: 100px;"></div>					
Title: <div style="border: 1px solid black; padding: 2px;">Manzanita Tribal Chairwoman</div>					
Organizational Affiliation: <div style="border: 1px solid black; padding: 2px;">Manzanita Band of Diegueno Mission Indians</div>					
* Telephone Number: <div style="border: 1px solid black; padding: 2px;">619-766-4930</div>			Fax Number: <div style="border: 1px solid black; width: 150px;"></div>		
* Email: <div style="border: 1px solid black; padding: 2px;">Ex. 6 Personal Privacy (PP)</div>					

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

I: Indian/Native American Tribal Government (Federally Recognized)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities
Relating to the Clean Air Act

* 12. Funding Opportunity Number:

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

Manzanita Enhanced Air Quality Monitorina Project

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant * b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="229,072.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="229,072.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

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21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed:

BIOGRAPHICAL SKETCH

David Thompson

Manzanita Band of the Kumeyaay Nation

Manzanita Environmental and Natural Resources Department Lead Air Technician

David Thompson has worked for the Manzanita Environmental and Natural Resources Department (MEND) since 2003 as the Lead Air Technician where he oversees the Tribe's Federally-funded air program. David maintains the current air monitoring instruments (EBAM and EBAM Plus) and performs calibrations and oversees data entry into AQS and AirNow.

David has taken numerous courses through the Institute for Tribal Environmental Professionals Tribal Air Monitoring Support (TAMS) Center. This program focuses on air quality management and technical training of Tribal air monitoring professionals.

David's training and experience will aid in the successful implementation of the Manzanita Enhanced Air Monitoring Project. These include quality assurance fundamentals, quality assurance project plan, and emissions inventory.

**Indian Organizations
Indirect Cost Negotiation Agreement**

ETIN: 95-3126854

Organization:

Manzanita Band of Mission Indians
PO Box 1302
Boulevard, CA 91905-0402

Date: May 30, 2019

Report No(s): 19-A-0769 (FY18C)
19-A-0770 (FY19C)

Filing Ref.:

Last Negotiation Agreement
dated October 12, 2018

The indirect cost rate contained herein is for use on grants, contracts, and other agreements with the Federal Government to which Public Law 93-638 and 2 CFR Part 200 apply for fiscal years beginning on or after December 26, 2014 subject to the limitations contained in 25 CFR 900 and Section II.A. of this agreement. Applicable OMB Circulars and the regulations at 2 CFR 225 will continue to apply to federal funds awarded prior to December 26, 2014. The rate was negotiated by the U.S. Department of the Interior, Interior Business Center, and the subject organization in accordance with the authority contained in applicable regulations.

Section I: Rate

Type	Effective Period		Rate*	Locations	Applicable
	From	To			To
Fixed Carryforward	01/01/18	12/31/18	18.80%	All	All Programs
Fixed Carryforward	01/01/19	12/31/19	19.54%	All	All Programs

***Base:** Total direct costs, less capital expenditures and passthrough funds. Passthrough funds are normally defined as payments to participants, stipends to eligible recipients, or subawards, all of which normally require minimal administrative effort.

Treatment of fringe benefits: Fringe benefits applicable to direct salaries and wages are treated as direct costs; fringe benefits applicable to indirect salaries and wages are treated as indirect costs.

Section II: General

Page 1 of 3

A. Limitations: Use of the rate(s) contained in this agreement is subject to any applicable statutory limitations. Acceptance of the rate(s) agreed to herein is predicated upon these conditions: (1) no costs other than those incurred by the subject organization were included in its indirect cost rate proposal, (2) all such costs are the legal obligations of the grantee/contractor, (3) similar types of costs have been accorded consistent treatment, and (4) the same costs that have been treated as indirect costs have not been claimed as direct costs (for example, supplies can be charged directly to a program or activity as long as these costs are not part of the supply costs included in the indirect cost pool for central administration).

B. Audit: All costs (direct and indirect, federal and non-federal) are subject to audit. Adjustments to amounts resulting from audit of the cost allocation plan or indirect cost rate proposal upon which the negotiation of this agreement was based will be compensated for in a subsequent negotiation.

C. Changes: The rate(s) contained in this agreement are based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in organizational structure, or changes in the method of accounting for costs that affect the amount of reimbursement resulting from use of the rate(s) in this agreement, require the prior approval of the cognizant agency. Failure to obtain such approval may result in subsequent audit disallowance.

D. Rate Type:

1. **Fixed Carryforward Rate:** The fixed carryforward rate is based on an estimate of costs that will be incurred during the period for which the rate applies. When the actual costs for such period have been determined, an adjustment will be made to the rate for a future period, if necessary, to compensate for the difference between the costs used to establish the fixed rate and the actual costs.

2. **Provisional/Final Rate:** Within six (6) months after year end, a final indirect cost rate proposal must be submitted based on actual costs. Billings and charges to contracts and grants must be adjusted if the final rate varies from the provisional rate. If the final rate is greater than the provisional rate and there are no funds available to cover the additional indirect costs, the organization may not recover all indirect costs. Conversely, if the final rate is less than the provisional rate, the organization will be required to pay back the difference to the funding agency.

3. **Predetermined Rate:** A predetermined rate is an indirect cost rate applicable to a specified current or future period, usually the organization's fiscal year. The rate is based on an estimate of the costs to be incurred during the period. A predetermined rate is not subject to adjustment. (Because of legal constraints, predetermined rates are not permitted for Federal contracts; they may, however, be used for grants or cooperative agreements.)

E. Rate Extension: Only final and predetermined rates may be eligible for consideration of rate extensions. Requests for rate extensions of a current rate will be reviewed on a case-by-case basis. If an extension is granted, the non-Federal entity may not request a rate review until the extension period ends. In the last year of a rate extension period, the non-Federal entity must submit a new rate proposal for the next fiscal period.

F. Agency Notification: Copies of this document may be provided to other federal offices as a means of notifying them of the agreement contained herein.

G. Record Keeping: Organizations must maintain accounting records that demonstrate that each type of cost has been treated consistently either as a direct cost or an indirect cost. Records pertaining to the costs of program administration, such as salaries, travel, and related costs, should be kept on an annual basis.

H. Reimbursement Ceilings: Grantee/contractor program agreements providing for ceilings on indirect cost rates or reimbursement amounts are subject to the ceilings stipulated in the contract or grant agreements. If the ceiling rate is higher than the negotiated rate in Section I of this agreement, the negotiated rate will be used to determine the maximum allowable indirect cost.

I. **Use of Other Rates:** If any federal programs are reimbursing indirect costs to this grantee/contractor by a measure other than the approved rate(s) in this agreement, the grantee/contractor should credit such costs to the affected programs, and the approved rate(s) should be used to identify the maximum amount of indirect cost allocable to these programs.

J. **Other:**

1. The purpose of an indirect cost rate is to facilitate the allocation and billing of indirect costs. Approval of the indirect cost rate does not mean that an organization can recover more than the actual costs of a particular program or activity.

2. Programs received or initiated by the organization subsequent to the negotiation of this agreement are subject to the approved indirect cost rate(s) if the programs receive administrative support from the indirect cost pool. It should be noted that this could result in an adjustment to a future rate.

3. Each Indian tribal government desiring reimbursement of indirect costs must submit its indirect cost proposal to our office within six (6) months after the close of the Tribe's fiscal year, unless an exception is approved.

Section III: Acceptance

Listed below are the signatures of acceptance for this agreement:

By the Indian Organization:

By the Cognizant Federal Government
Agency:

Manzanita Band of Mission Indians
Tribal Government Agency

Angela Elliott Santos /s/
Signature

Angela Elliott Santos
Name (Type or Print)

Tribal Chairwoman
Title

5/29/19
Date

U.S. Department of the Interior
Interior Business Center

CRAIG WILLS /s/
Digitally signed by CRAIG WILLS
Date: 2019.05.30 11:17:44 -07'00'
Signature

Craig A. Wills
Name
Division Chief
Indirect Cost Services Division
Title

Negotiated by Stacy Frost
Telephone (916) 930-3815

BIOGRAPHICAL SKETCH

Trisha Frank

Manzanita Band of the Kumeyaay Nation

Manzanita Environmental and Natural Resources Department Coordinator

Trisha Frank has a proven background overseeing Federal grant programs, developing educational content, and performing outreach and communication that benefit California Indian Tribes. Trisha has worked with since 1993 where she has managed Federally funded grants including the U.S. Environmental Protection Agency (EPA) funded clean water, wetlands, solid waste, and air quality programs. At MEND, Trisha also oversees tribal resiliency and land management projects funded through the Bureau of Indian Affairs and USDA NRCS.

Trisha also has worked on numerous projects providing technical assistance to California Indian Tribes through the Indian Energy Assistance Program located in the Governor's Office of Planning and Research where she developed *Native Power: A Handbook on Renewable Energy and Energy Efficiency for Native American Communities* and edited a quarterly *Indian Sustainable Energy News*. She also worked with the Native American Energy Education Project (NAREEP) at the University of California at Berkeley that was funded through the U.S. Department of Energy. The NAREEP team developed and conducted the Tribal Energy Survey of renewable energy and energy efficiency projects in Indian Country. Her projects included renewable energy focused project development and the creation of the guidebook, *Renewable Energy: Native to California*. Additional communications experience includes the development of newsletters for various professional organizations including Society for Technical Communications, California Wind Energy Association, Association of Energy Engineers, and others,

Other areas of expertise demonstrated by Trisha career will be valuable for implementing the community engagement and education components for the Manzanita Enhanced Air Quality Monitoring Project. These include performing outreach and event coordination for professional organizations throughout California. These organizations include California Wind Energy Association, American Wind Energy Association, San Diego Gas and Electric, Southern California Edison, Pacific Gas and Electric, and Indian Energy Assistance Program located in the Governor's Office of Planning and Research.

Trisha's educational background includes a BA from University of Oklahoma in History and English Literature and a MS in Resource Planning and Conservation from the University of Michigan.



March 22, 2022

Honorable Angela Elliott-Santos
Tribal Chairwoman
Manzanita Band of the Kumeyaay Nation
P.O. Box 1302
Boulevard, CA 91905

RE: Manzanita Enhanced Air Quality Monitoring Project

Dear Chairwoman Elliott-Santos,

We, at Blue Tomorrow, would be pleased to collaborate with the Manzanita Band of the Kumeyaay Nation on the Manzanita Enhanced Air Quality Monitoring Project. Registered as a small business with U.S. Small Business Association (Control ID 001519053), Blue Tomorrow specializes in field data collection, sensor and telemetry systems, and assessing pollution impacts to water quality, air quality, ecosystems, and communities. We would be committed to helping the Manzanita Tribe with air monitoring activities, support the Tribal community to assess air quality levels and potential exposure risks, and provide training for Manzanita staff so they can implement an effective air monitoring strategies to improve air quality on the Reservation.

Blue Tomorrow has successfully developed and implemented community air monitoring networks in California since 2016. We have worked with Tribal and community groups to develop real-time low-cost air quality monitoring networks. Most recently, we have successfully developed the Southern California Tribal Community Air Monitoring Project on the Pala Reservation; the Lost Hills Air Quality and Emissions Reduction Project in Lost Hills, California; Chumash Community Air Quality Monitoring Network with the Santa Ynez Band of Chumash Indians; and Morongo Community Air Quality Monitoring Network with the Morongo Band of Mission Indians.

If the project is funded and we are chosen as the technical contractor, we would deliver on the tasks needed for launching the Manzanita Enhanced Air Quality Monitoring Project. We would commit to training of Manzanita staff and to the support the maintenance and operation of the system, once up and running, for the duration of the 2-year project period. Our expertise with the sensors and technology being proposed through this project would allow us to accurately scope out budget and timeline for the Manzanita Enhanced Air Quality Monitoring Project and provide assurance for its efficient execution. Please contact us with any questions pertaining to our work or technical elements of the proposed project.

Sincerely,

Alex Dragos, Founder
(805) 455-3089
dragos@blue-tomorrow.com

Eric Hopkins, Founder
(415) 497-0220
hopkins@blue-tomorrow.com

Manzanita Enhanced Air Quality Monitoring Project

Section 5 – Quality Assurance Statement

QAQC Responsible Individual

The responsible individual for this project will be David Thompson, Environmental Technician with the Manzanita Environmental and Natural Resources Department. David has been with MEND since 1998, and has been an Environmental Technician since 2002, where he has worked on the Tribe's air monitoring including performing calibrations and quality assurance since 2003. MEND currently has a Quality Assurance Project Plan (QAPP) approved by the U.S. EPA on September 30, 2020. This plan covers roles and responsibilities, standard operating procedures and data quality controls for utilization of the EBAM Plus instrument and data entry into AQS.

Criteria and Process for Determining Acceptable Data

The process that will be used to determine acceptable data includes utilizing Federal Reference Method (FRM) and Federal Equivalent Method (FEM) for calibration and as a reference standard. Low-cost monitors are calibrated on regular (at minimum quarterly) intervals. In addition, regular weekly data check are conducted for outliers and to make sure instruments are reporting within anticipated ranges. If air quality sensors are not within quality control standards, they are replaced with new sensors, and the data for the period in question is considered invalid. The low-cost monitors used in the proposed monitoring project utilize commercially available sensors with documented tolerances as tested by the manufacturer and (for some) the South Coast Air Quality Management District – AQ SPEC program. The monitors are a modular system of sensors that makes the replacement of sensors easy and low cost. Statistical methods are used to compare data from the project community monitors to the FRM/FEM references; these include correlation coefficients, daily hourly maximums, and means.

An update to the existing QAPP will be produced to incorporate the utilization of low-cost sensors included in this project. This update will incorporate USEPA standards in terms of their structure and elements, and contain details on project location, timeline, data collection methods, data forms or tools to be used, responsible personnel, and data quality controls for validating data.



Project Title: Manzanita Enhanced Air Quality Monitoring Project

Applicant Information

Manzanita Band of the Mission Indians a.k.a., Manzanita Band of the Kumeyaay Nation

Address: 6 Old Mine Road, P.O. Box 1302, Boulevard CA 91905

Primary contact: Angela Elliott-Santos, Manzanita Chairwoman, 619-766-4930, aelliottsantos7@aol.com

DUNS: 947329165; UEI: MB81SN4AL2B5

Set-Aside: Tribal Set-aside

Brief Description of Applicant Organization: The Manzanita Indian Reservation was established under authority of the Act of January 11, 1891 (26 Stat. 712-714, c.65) and now comprises a land base of 4,580 acres, located approximately 10 miles north of Mexico and 60 miles east of San Diego, California. Members of the Manzanita Band belong to the Kumeyaay Nation. The traditional territory of the Kumeyaay extends north and south of the Mexican border from the Pacific Coast to the Colorado River. See the "Map" in the "Optional Project Narrative File" under the Narrative Form in the grants.gov submission.

Project Partners: -Manzanita Environmental and Natural Resources Departments

Contact: Angela Elliott-Santos, Tribal Chairwoman, aelliottsantos7@aol.com, (619) 766-4930

-Blue Tomorrow, LLC Contact: Eric Hopkins, Founder, hopkins@blue-tomorrow.com, (415) 497-0220

Project Location: The project will be conducted across the 4,580 -acre Manzanita Reservation. See "Map - Manzanita Indian Reservation" in the "Optional Project Narrative File" in the grants.gov submission.

Air Pollutant Scope: Ozone, Nitrogen Dioxide, PM2.5 and PM10

Budget Summary

EPA Funding Requested	Total Project Cost
229,072	229,072

Project Period: November 2022 – November 2024

Short Project Description: The Manzanita Enhanced Air Quality Monitoring Project will implement a continuous air monitoring network to detect levels of PM 2.5, PM 10, ozone, and nitrogen dioxide throughout the Manzanita Reservation. A website and educational materials will be provided to inform the Tribal community how to reduce exposure to harmful air pollutants. Through this project, the MEND will gain technical capacity to improve its air quality monitoring capabilities and bolster resiliency for the Manzanita Community.

Manzanita Enhanced Air Quality Monitoring Project Workplan

Section 1 – Project Summary and Approach

A. Overall Project

The Manzanita Enhanced Air Quality Monitoring Project involves the implementation of a real-time air monitoring network. This network would deploy monitors that contain various sensors that detect Ozone, Nitrogen dioxide, PM_{2.5}, and PM₁₀ concentrations, as well as ambient temperature, relative humidity, atmospheric pressure, and wind speed and direction. As part of this project, training, capacity building, data analysis, and community outreach and engagement will be conducted.

The following is a detailed task by task scope of work describing the project activities that will be funded through this grant. Task 1 will be completed after the notice the project is selected for funding and before the grant is awarded.

Task 1: Quality Assurance Project Plan Development – Pre-award

1.1 – Kickoff Meeting - A kickoff meeting will be held with the project team. Project goals, air monitoring objectives, community participation, and responsibilities of each member of the project team will be discussed. The project timeline and dates for milestones will be reviewed.

1.2 – Quality Assurance Project Plan - The information contained in the work plan will be built upon to develop a Quality Assurance Project Plan (QAPP) for the Manzanita Tribal Community Air Monitoring Project. Specifically, tasks 2.2, 2.5 and 2.6 contain initial QA/QC procedures that will be included in the QAPP. The QAPP will adhere to USEPA guidance standards. A QAPP for the for this project would ensure that data collected by the air quality was of the highest quality and would document quality assurance and quality control procedures that are being conducted and help standardize them.

Task 2: Monitoring Network Development

2.1 – System Development - A total of four (4) custom air quality monitors will be obtained that will be equipped with cellular telemetry and commercially available sensors that continuously detect and measure concentrations of ozone (O₃), nitrogen dioxide (NO₂), and particulate matter (PM) 2.5 & PM 10, ambient temperature, humidity, and pressure, and wind speed and direction. It is anticipated that gas sensors will be sourced from Alphasense, PM sensors will be sourced from Plantower, wind sensors will be sourced from PCE Americas Inc., and electrical sensors and telemetry hardware will be sourced from Yoctopuce.

2.2 – Calibration - Once monitors are developed, all sensors will be evaluated simultaneously to track data performance and consistency. Monitors will then be calibrated by collocating at the nearest representative FRM/FEM air station. Re-calibration of each of the four (4) monitors will be conducted on a quarterly basis to ensure measurements are as accurate as possible. Additional calibrations will be conducted for wildfire smoke monitoring during active wildfire smoke events.

2.3 – Website Development - A website will be developed that displays air quality data transmitted wirelessly from the monitors in near real-time (pollutant concentrations and AQI will be averaged appropriately depending on the pollutant). After network installation, data transmitted to the website will be evaluated for consistency, accuracy, and potential errors. Once the website is finalized and

testing is complete, it will be made accessible to the community. The website will be a resource for the community to obtain air quality data and other information that they can use to reduce their exposure to harmful air pollutants, including wildfire smoke. The website will also contain links to summary reports, relevant news articles, educational materials developed for community meetings and other information about the air monitoring and project.

2.4 – Installation - Air quality monitors will be installed on the Manzanita Reservation, and one monitor will be periodically collocated at the regulatory monitoring station in Alpine, California (or other representative location) for calibration purposes. Monitors will be sited following EPA air monitoring siting criteria, including placing the monitoring equipment near the typical breathing zone of 3 to 6 feet above ground level and away from vegetation or structures that could impede airflow. Once the monitors are installed, they will begin transmitting data to the cloud database.

2.5 – Operation and Maintenance - Air quality monitors will be operated and maintained for 18 months. Sensor performance will be monitored to identify if maintenance or sensor replacement is needed. Typical on-going operation and maintenance is expected to include ordering replacement sensors, troubleshooting issues, and continuing data analysis and website maintenance. Maintenance will be conducted as needed and determined by performance checks conducted every week. If an air monitor is malfunctioning and (or) reporting unusual measurements the malfunctioning sensor data or entire monitor may be removed from the community website until the specific issue is fixed. The website will be checked, security updates performed, and content backed up monthly.

2.6 – Quality Assurance and Controls - Data will be reviewed in accordance with the approved QAPP. This will likely include reviewing data every week to ensure that the monitors and website continue to record and report, respectively, accurate air pollutant concentration measurements. For criteria air pollutants (PM, ozone, nitrogen dioxide) pollutant concentrations will be averaged to compare results with regulatory thresholds and Air Quality Index health indicators. Additional quality assurance and controls will be conducted when the reservation and region is experiencing wildfire smoke impacts. A detailed record of data review, calibrations (including coefficients), and maintenance logs will be kept.

Task 3: Community Engagement & Education

3.1 – Communications Plan - The project team will develop communication strategies to ensure that the Tribal community remains informed about the network, knows how to use the community website, and can provide input and feedback for the project. This plan will likely include utilizing existing Tribal avenues of environmental outreach such as public service announcements, community events, and newsletters, as well as identifying additional avenues such as social media and interactive features on the website to increase project engagement.

3.2 – Educational Content Development - The project team will develop educational materials to support clean air education, workshops, and community engagement. The education materials will be made available on the website. Materials will provide an overview of potential sources of local air pollution including wildfire smoke. Additional education materials will describe the AQI (what it is, how to interpret it, and how it is calculated), and will provide an overview of different air pollutants, their associated health risks, and the project's air quality monitoring resources.

3.3 - Community Outreach - The project team will conduct local community outreach to share information about the air quality project, promote engagement activities, and disseminate educational

materials. Activities outlined in the communications plan will be executed during the first year of network operations. For example, social media may be used to notify the Manzanita Community of the website and include education materials on air pollution and how to use the website. Outreach may also include providing a way for the community to submit feedback, such as potential observational data, air quality concerns, or volunteering space for relocating monitors.

3.4 – Community Educational Sessions – Up to four (4) educational sessions will be organized with the MEND and the Manzanita Education Department. The community workshops will be an opportunity for community members and students to learn about air quality issues and ask questions. Presentations and (or) educational handouts will be developed and each meeting will have a defined theme such as: Local air pollution and sources, types of air pollutants, wildfire impacts to air quality; and ways to limit personal exposure.

Task 4: Technical Capacity Building & Workforce Development

4.1 – Develop Training Materials – Materials will be developed for training Manzanita’s Air Quality Technicians to perform maintenance activities. The objectives of the trainings are to teach Manzanita staff members how to interpret data from the monitors and how to perform basic maintenance on the monitors. These trainings will increase the capacity of the Tribe to monitor its own air quality and provide workforce development.

4.2 – Technical Training Workshops – Up to four (4) technical training workshops will be organized with the MEND to go over the sensor technologies being used, limitations of the sensors, QAQC procedures, and routine maintenance and sensor replacement.

Task 5: Data Analysis Reports

5.1 – Annual Data Analysis Reports - Two annual summary reports will be developed that include an analysis of the data collected by the monitoring network during the previous year and monthly website visitation data. The summary report will include relevant graphs, tables, diagrams, and pictures. Pollutant concentration data will be averaged to the appropriate averaging times for each pollutant. Data analysis will focus on AQI break points and health threshold exceedances, National Ambient Air Quality Standards, seasonal trends, and comparisons to the closest regulatory monitoring stations. The reports will be made available on the community air monitoring website.

Task 6: Administration

6.1 – Grant Reporting - Manzanita will be responsible for updating the EPA on project progress and submitting the necessary quarterly reports and final report during the grant performance period. These reports will include summarizing relevant project tasks that have been completed to date, when necessary. This task will ensure that all reporting requirements are met, and the EPA stays apprised of project activities and accomplishments.

B. Project significance

Currently, the only air monitoring conducted on the Manzanita Reservation is for PM₁₀, and the closest regulatory air monitoring station is in Alpine, California, about 25 miles to the west. There is a lack of air monitoring for pollutants that regularly impact the Tribal Community, including ozone and fine particulates from wildfire smoke. San Diego County is nonattainment for Ozone (State and Federal), PM_{2.5} (State), and PM₁₀ (State), but there is little monitoring in the eastern portion of the county to

evaluate the air pollution impacting the Manzanita Reservation. The proposed project will fill this data gap by providing baseline data on these air pollutants. This monitoring network will allow the Tribe to communicate local air quality health risks to its members, as well as allowing tribal community members to track local air pollution for themselves.

The large densely populated area around the City of San Diego generates air pollution that can migrate east to the reservation and impact the Reservation. The Tribal Community is unaware of local air pollution and the potential health impacts associated with different air pollutants. The proposed project will not only provide the community with air quality data, but also will educate community members on air quality, how to interpret the AQI, associated air pollution health effects, and how to limit exposure during bad air quality days.

Through this project, an air monitoring network will be established using low-cost sensors that continuously detect pollutants that are affecting the tribal community. A website will be developed to display air quality data in real-time and be accessible to the Manzanita Community. This website will also provide statistics and analytical tools for MEND to help develop a baseline assessment of air quality on the Reservation. Training workshops will be held for Tribal staff on technical and policy elements related to air quality monitoring. Educational materials will be produced and shared with the Manzanita Community. Ultimately, this project will provide baseline data, training, and education that are needed to protect the health of the community.

The audiences served by this project will be the Manzanita Tribal Government and Tribal Community. Plans to engage the community are described in detail in the Scope of Work. This includes content that will educate the community how to interpret the air quality index and pollutant concentration data, the health effects of air pollution, and resources for reducing exposure to harmful air quality. Other engagement approaches will include outreach through social media, newsletters, and our other established channels.

Section 2 – Community Involvement

A. Community Partnerships

Manzanita Tribal Members and Tribal Leadership strongly support the proposed project. This includes support from Tribal Council, the Manzanita Environmental and Natural Resource Department ("MEND"), and the Education Department, as these groups recognize the importance of air quality monitoring and education for protecting the Tribal Community. This project will utilize these existing partnerships within the Manzanita Tribe that work directly with the community. This collaborative approach will ensure the project is focused on community benefit.

MEND manages various environmental project relating to air and water quality and wildlife habitat found on the Manzanita Reservation. MEND will oversee and coordinate the proposed Manzanita Enhanced Air Quality Monitoring Project activities on the Reservation. This will include working with Tribal departments to enhance operational efficiency and disseminate information that resonates with community members. Technical capacity building and training of MEND staff will create a lasting benefit for the Tribe by strengthening its ability to monitor air quality and take action to reduce the pollution burden to community members.

MEND will consult with the Education Department to develop educational content tailored for our multi-generational Tribal Community. This educational content will include information on how to interpret air quality index and other data, the health effects of air pollution, and resources for reducing exposure to harmful air quality. This information will be developed for all age groups to promote community awareness and integrate into lessons on Science, Technology, Engineering, and Math (STEM) subjects. The Mend and Manzanita Education Department Letters of Support can be found in the "Optional Project Narrative File" under the Narrative Form in the grants.gov submission.

The Manzanita Tribal Leadership will be an important partner for establishing the monitoring network and continuing efforts after the grant period concludes. This project supports the long-term vision of the Tribe and its leadership by protecting the community from harmful effects of air pollution. Initiating this project will help propel Manzanita towards a future of resiliency, including from climate change effects of impaired air quality from wildfire.

Manzanita will also partner with Blue Tomorrow, LLC (Blue Tomorrow) (or similar technical contractor with experience developing community-scale air monitoring projects on Tribal Reservations) to develop the monitoring network and lead in the implementation of technical activities. Blue Tomorrow is a good example of the caliber of expertise needed that will be chosen for this project. Blue Tomorrow has assisted with technical aspects of other tribal community air monitoring networks throughout California. The technical contractor chosen will be an environmental consulting group that specializes in field data collection, air sensor and telemetry systems, and assessing pollution impacts to water quality, air quality, ecosystems, and communities. For this project, the technical contractor will lead the air monitoring network development, data quality controls and assurances, development of education and outreach materials, technical assistance and trainings, and the development of plans and final report. They will help to build the Tribe's capacity by providing training and technical assistance to Manzanita staff throughout the project's duration. Blue Tomorrow's Statement of Qualifications can be found in the "Optional Project Narrative File" under the Narrative Form in the grants.gov submission.

B. Community Engagement

Community engagement is an integral part of this project and necessary for the successful utilization of the monitoring network by the Manzanita Community. A primary goal of this project is to reduce the community's exposure to harmful air pollutants. To help achieve this goal, a community website will be developed where the Tribal Community will have access to real-time air quality data and other educational resources. This educational content will consist of information for interpreting the air quality index and other data, the health effects of air pollution, and resources for reducing exposure to harmful air quality.

Effective community engagement will be critical for encouraging community members to utilize these resources and take action. To bolster this engagement, a communications plan will be developed before the air monitoring network is launched to identify the best ways for contacting, informing, and directing Tribal community members to these resources. Content will be created that incorporates appropriate language for presenting technical information to a non-technical audience and directing them to resources created through this project. Engagement channels will likely include social media posts, newsletters, and communication through various Tribal departments.

Educational materials may include stand-alone documents or videos that can be shared through social media or downloaded from the website. A guide and video tutorial will be developed on how to use the

website. Additional materials may also include information on the health effects of air pollution, recommended air purifiers, how to build a DIY air purifier using MERV filter, where to find protective masks, and other tips for mitigating effects of wildfire smoke. Other engagement may also include providing a way for the community to submit feedback, such as potential observational data, air quality concerns, or volunteering space for relocating monitors. Outreach will also be conducted via the Education Department to educate the students on these issues and provide curriculum for Science Technology Engineering and Math (STEM) lessons.

Section 3 – Environmental Justice and Underserved Communities

The Manzanita Band of the Kumeyaay Nation is a federally recognized tribe and disenfranchised group impacted by environmental injustice. The traditional territory of the Kumeyaay people extends north and south of the Mexican border from the Pacific coast almost to the Colorado River. The 4,580-acre Manzanita Reservation borders the Campo Indian Reservation (on the south) and La Posta Reservation (to the west) and lies within 10 miles of the U.S. Mexican Border.

This area is underserved and disproportionately affected by air pollution. According to the EPA EJScreen, the Manzanita Reservation is in the 89th percentile for ozone compared to the rest of the United States. For all Environmental Justice Indexes, including Particulate Matter 2.5, Air Toxics Cancer Risk, and Air Toxics Respiratory Health Index, the Reservation are above the 60th percentiles for national indicators. Socioeconomically, the unemployment rate in this area is in the 97th percentile, and 89th percentile for those over the age of 64. Poor air quality disproportionately impacts sensitive groups, including people with heart and lung disease, children, and seniors (over 64 years of age). The elderly, indigent, and people with underlying health conditions have also been excessively affected by COVID-19. This project will provide short-term, intermediate, and long-term benefits that directly address these environmental justice disparities.

Through the development of air quality monitoring network and educational information, this will provide the Tribal community (including sensitive groups) with increased awareness and access to resources to improve the understanding of human health risks from air pollution exposure. Continuous monitoring in various locations on the Reservation will help better identify spatial and temporal problems associated with air quality. Intermediate outcomes include providing educational resources that the community can use to act and mitigate effects of air pollutants. This will in turn empower the Manzanita Community to achieve the long-term outcome of reducing exposure to harmful air pollutants.

Section 4 – Environmental Results—Outcomes, Outputs and Performance Measures

A. Expected Project Outputs and Outcomes

Several outputs are expected to result from implementing the project activities outlined in the work plan. Project outcomes include short-term, intermediate, and long-term outcomes that will be achieved through the successful implementation of tasks 1-6. Short-term outcomes focus on improving knowledge for the Manzanita Community. Intermediate outcomes will result from changing behavior of community members. And long-term outcomes will be achieved through changing conditions of pollution exposure to Tribal members and their descendants. Specific outcomes that will be achieved by the Manzanita Enhanced Air Quality Monitoring Project are shown in the following tables:

Project Outputs
<ul style="list-style-type: none"> • Identification of air pollution levels for PM 2.5, PM 10, ozone, and nitrogen dioxide. • Deployment of equipment to conduct air quality monitoring on the Manzanita Reservation • Develop a website that displays near real-time air quality data for the Manzanita Community • Develop educational content to help community reduce exposure to harmful air pollutants • Promotion of partnerships and community involvement
Short-term outcomes
<ul style="list-style-type: none"> • Identifying air pollution levels on the Manzanita Reservation • Increasing community awareness and education • Increasing access to information and tools that increase understanding and reduction of environmental and human health risks
Intermediate outcomes
<ul style="list-style-type: none"> • Community action to mitigate pollutant exposure
Long-term outcomes
<ul style="list-style-type: none"> • Reduction of human exposure to air pollutants

B. Performance Measures and Plan

Performance measures are built into this project to track, measure, and report project progress. The approach for keeping track of project performance will involve quarterly meetings to review the project timeline and milestones. During these meetings, each performance measure (noted below) will be discussed. Data will be collected and summarized to be used for reports to the USEPA on project progress. The following are descriptions of these performance measures.

- Overseeing performance of project partners and technical consultant in completing tasks described in the project work plan;
- Tracking and reporting project progress on expenditures;
- Tracking and reporting on project milestones;
- Tracking and measuring utilization of the website by the Manzanita community;
- Tracking the number of outreached and engaged Tribal members and descendants

C. Timeline and Milestones

The following table references the tasks, milestones, and anticipated timeline for the Manzanita Enhanced Air Quality Monitoring Project. The timeline is based on the grant award agreement beginning in November 2022 and is subject to change. Task 1 will be completed after the notice the project is selected for funding (est. August 2022) and before the grant is awarded. Milestones are provided with each task, as described in Section 1 of the Work Plan.

Project Tasks	Milestone	Anticipated Timing
Task 1.1 — Kickoff Meeting	Meeting	August 2022
Task 1.2 — Quality Assurance Project Plan	QAPP Document	August 2022 – November 2022

Task 2.1 — Monitor Development	4 Air Quality Monitors Developed	November 2022 – February 2023
Task 2.2 — Collocate and Calibrate Monitors	Monitors field calibrated	March 2023 – November 2024
Task 2.3 — Website Development	Website Developed	November 2022 – March 2023
Task 2.4 — Network Installation	Install 4 Air Quality Monitors	March 2023
Task 2.5 — Network Operations and Maintenance	Maintain Air Quality Monitors for 30 months	April 2023 – November 2024
Task 2.6 — Data Quality Control & Assurance	Perform Data QA/QC for 30 months	April 2023 – November 2024
Task 3.1 — Communications Plan	Develop Communications Plan	January 2023 – March 2023
Task 3.2 — Educational Content Development	Produce Educational Content	January 2023 – October 2024
Task 3.3 — Community Outreach	Perform Community Outreach	January 2023 – November 2024
Task 3.4 — Community Educational Sessions	Hold 4 Educational Sessions	March 2023 – November 2024
Task 4.1 — Develop Training Materials	Develop Training Materials	January 2023 – October 2024
Task 4.2 — Technical Training Workshops	Hold 4 Technical Training Workshops	March 2023 – November 2024
Task 5.1 — Annual Summary Reports	Produce 2 Summary Reports	October 2023 – November 2024
Task 6.1 — Grant Administration & Quarterly Reports	Produce Quarterly Reports & Final Report	November 2022 – November 2024

Section 5 – Quality Assurance Statement (See attached statement in the "[Optional Project Narrative File](#)" under the Narrative Form in the grants.gov submission.

Section 6 – Programmatic Capability and Past Performance

Past Performance and Reporting Requirements

The Manzanita Environmental and Natural Resources Department (MEND) has received numerous federal grants over the last three years and has successfully reported quarterly progress and final reports for each grant. Below are five US EPA grant assistance programs that the Tribe has received and successfully completed within the past three years.

- EPA General Assistance Program (GAP) – The Tribe has been receiving GAP grant assistance annually since FY 2001, and mostly uses this funding for solid waste management.

- EPA Clean Water Act § 103 (CAA 103) – The Tribe has been receiving CWA 103 grant assistance since FY 1998 and the conducts monitoring to assess air quality on the reservation from PM 10.
- EPA Clean Water Act § 319 (CWA 319) – The Tribe has been receiving CWA 319 grant assistance since FY 2001, and most recently has received this funding for FY 2022. Under the CWA 319 grant, the Tribe assesses and manages nonpoint source pollution issues on the reservation.
- EPA Tribal Wetland Program Development – The Tribe has been receiving Wetlands Program Development grant assistance since FY 2015, and most recently has received this funding for FY 2022. Under this grant, the Tribe assesses and manages wetlands on the reservation.
- EPA Clean Water Act § 106 (CWA 106) – The Tribe has been receiving CWA 106 grant assistance since FY 2001, and most recently has received this funding for FY 2022. Under the CWA 106 grant, the Tribe conducts monitoring to assess the quality of surface water on the reservation.

Staff Expertise The following are key Tribal staff that will be working on the project, along with anticipated roles and responsibilities they will undertake. Biographical sketches for these staff are included "[Optional Project Narrative File](#)" under the Narrative Form in the grants.gov submission.

The MEND Coordinator (Trisha Frank) will oversee the Manzanita Enhanced Air Quality Monitoring Project to ensure that each task and associated deliverables are completed on schedule and within the budget. This includes working with the contractor for technical services, managing the Air Quality Technician, working with the MEND Assistant to perform community outreach, reviewing project deliverables, and overseeing grant administrative requirements.

The MEND Lead Air Quality Technician (David Thompson) will be responsible for performing routine maintenance and assisting with collocating and calibrating air monitors on the Manzanita Reservation. Other tasks include collaborating on the community engagement and education and participating on the technical training workshops.

Section 7 – Budget

A. Budget Detail

Personnel - The MEND Coordinator's annual salary is \$104,350, and percentage of time assigned to the project is 5.75% (240 hours over 2-years). The total cost for this budget period is \$12,000. The MEND Air Technician's annual salary is \$50,088, and percentage of time assigned to the project is – 12.36% (527 hours over 2-years). The total cost for this budget period is \$12,648. The MEND Assistant's annual salary is \$39,653, and percentage of time assigned to the project is – 3.74% (156 hours over 2-years). The total cost for this budget period is \$2,964.

Fringe Benefits - Fringe benefits for the air technician and assistant represent 18% of salary and wages and cover the Tribe's contribution for benefits, taxes, FICA, Worker's Compensation, Unemployment Insurance, etc.

Supplies - For this project, supplies include four continuous air monitors at \$3,894 per unit. These include hardware for low-cost air quality sensors, cellular telemetry, wind anemometer, and meteorological sensors. \$1,440 are budgeted for replacement parts (\$360 per unit).

Contractual - \$144,190 is allocated for contractual services including technical services (QAPP, air quality monitoring system development, calibrations, training and technical workshops, educational content

development), website development, website hosting and security, cloud database services, and cellular services for data telemetry.

Indirect Costs - Manzanita Band of the Kumeyaay Nation has a Federally approved indirect cost rate of 19.54%. The Indirect Cost Agreement is under "Other Attachments - Mandatory" in the grants.gov submittal. This is applied to all direct costs associated with the project.

Budget Table

Line Item & Itemized Cost	EPA Funding
Personnel	
(1) MEND Coordinator @ \$50/hr. for 240 hours	\$12,000
(2) MEND Air Technicians @ \$24/hr. for 527 hours	\$12,648
(3) MEND Assistant @ \$19/hr. for 156 hours	\$2,964
TOTAL PERSONNEL	\$27,612
Fringe Benefits	
18% of Salary and Wages for Air Technicians and Assistant - Benefits, FICA, SUI	\$2,810
TOTAL FRINGE BENEFITS	\$2,810
Supplies	
4 Continuous Air Monitors (O3, NO2, PM2.5, PM10, Wind, Temp, Humidity, Atm Pressure) @ \$3,894/unit	\$15,576
Replacement Sensors @ \$360/unit	\$1,440
TOTAL SUPPLIES	\$17,016
Contractual	
Technical Services Contract - Blue Tomorrow services for QAPP, Monitoring & Network Development, Community Engagement & Education, Technical Capacity Building & Workforce Development, Data Analysis Reports, Administrative Support	\$108,790
1 Custom Air Monitoring Website	\$25,000
Cellular Telemetry @ \$50/month/unit for 20 months & 4 units	\$4,000
Cloud Database @ \$30/month/unit for 20 months & 4 units	\$2,400
Website Hosting and Security @ \$200/month for 20 months	\$4,000
TOTAL CONTRACTUAL	\$144,190
Indirect Charges	
Federal Indirect Cost Rate X Personnel, Supplies, Contractual (Federal Negotiated Indirect Cost Rate = 19.54%)	\$37,444
TOTAL INDIRECT	\$37,444
TOTAL FUNDING REQUEST	\$229,072
TOTAL PROJECT COST	\$229,072

B. Reasonableness of Costs

The following project costs are broken out into direct costs (Tasks 1-6) and indirect costs. These cost estimates are reflective of the work plan described in detail in Section 1. Contractual services will be procured in accordance with the Tribe's Procurement Policy. Blue Tomorrow is identified as a potential project partner, although the selected contractor will have similar expertise developing community air monitoring projects with Tribal governments in California.

Task 1 QAPP Development - \$13,028

\$1,532 is allocated for Personnel; \$96 for Fringe; and \$11,400 is budgeted for Technical Services.

Task 2 Monitoring and Network Development - \$120,161

\$11,340 is allocated for Personnel; \$1,465 for Fringe; and \$90,340 is budgeted for Contractual costs (\$54,940 for Technical Services, \$25,000 for custom air monitoring website, \$4,000 for website hosting and security, \$2,400 for cloud database services, \$4,000 for cellular telemetry), \$17,016 for Supplies, including \$15,576 for four air monitoring units, and \$1,440 for replacement parts.

Task 3 Community Engagement and Education - \$22,201

\$7,628 for Personnel; \$473 for Fringe; and \$14,100 is budgeted for Technical Services.

Task 4 Technical Capacity Building and Workforce Development - \$11,756

\$10,050 is budgeted for Technical Services, \$1,568 for Personnel; and \$138 for Fringe.

Task 5 Data Analysis Reports - \$16,853

\$1,184 for Personnel; \$69 for Fringe; and \$15,600 is budgeted for Technical Services.

Task 6 Grant Administration - \$7,629

\$4,360 for Personnel; \$569 for Fringe; and \$2,700 is budgeted for Technical Services.

Indirect Costs - \$37,444

Federal Negotiated Indirect Cost Rate = 19.54% - See the Indirect Cost Agreement under "Other Attachments - Mandatory" in the grants.gov submittal.

C. Expenditure of Awarded Funds

MEND will oversee the project expenditures and work closely with Blue Tomorrow (or other technical contractor T.B.D. using the established Manzanita Procurement Policy) throughout the project period. At the onset of the project, MEND will establish a payment schedule to ensure that all deliverables will be produced in accordance with the project timeline. The MEND Coordinator will meet monthly with the contractor to track the progress of the Manzanita Enhanced Air Quality Monitoring Project.

These measures will ensure that the awarded grant funds will be expended in a timely and efficient manner throughout the Manzanita Enhanced Air Quality Monitoring Project.



Manzanita Band of the Kumeyaay Nation

March 21, 2022

United States Environmental Protection Agency
Office of Air Quality Planning & Standards
4930 Old Page Road
Research Triangle Park
North Carolina, 27709

Re: Letter of Support – Manzanita Enhanced Air Quality Monitoring Project

Dear Review Committee,

Thank you for your consideration of the Manzanita Enhanced Air Quality Monitoring Project. We are excited for the opportunity to share information with Tribal youth that we work with through the Manzanita Education Department. This project will provide a valuable resource for students to track air pollution levels and understand the importance of clean air in our community.

Understanding our local air quality using monitors that we can show our students is a great way to engage them on Science, Technology, Engineering, and Math (STEM) subjects. It also allows for topics that across subjects, including wildfires, climate change, and environmental awareness.

We are also excited to collaborate with the community on curriculum to engage and educate our students. We thank EPA staff for considering the proposal and encourage you to award funding for this important project.

Sincerely,

Angela Elliott-Santos, Tribal Chairwoman
Manzanita Band of the Kumeyaay Nation



Manzanita Band of the Kumeyaay Nation

March 21, 2022

Funding Review Committee
Enhanced Air Quality Monitoring for Communities
US Environmental Protection Agency

Re: Letter of Support – Manzanita Enhanced Air Quality Monitoring Project

Dear Review Committee,

The Manzanita Environmental and Natural Resources Department is pleased to support the application for a Manzanita Enhanced Air Quality Monitoring Project. This project will be a valuable resource for providing real-time air quality levels and health indicators to the Tribal community will empower them to reduce their exposure during times of harmful air quality.

The Manzanita Reservation is in nonattainment for ozone and prone to airborne particulate matter from wildfire and surrounding areas. These pollutants are known to cause cardiovascular and respiratory damage. Current air monitoring efforts on the Reservation are only testing for PM10. This project will fill that void and provide a resource for the Tribal community.

Thank you for your consideration. We look forward to increasing the understanding of the importance of clean air in our community. We thank EPA staff for considering the proposal and encourage you to award funding for this important project.

Sincerely,

Angela Elliott-Santos, Tribal Chairwoman
Manzanita Band of the Kumeyaay Nation

Manzanita Band of the Kumeyaay Nation

RESOLUTION

NO: 22.06

SUBJECT: Enhanced Air Quality Monitoring for Communities through the U. S. Environmental Agency to develop the Manzanita Enhanced Air Quality Monitoring Project submitted by the Manzanita Band of Diegueno Mission Indians; and

WHEREAS: The Manzanita Band of the Kumeyaay Nation ("Tribe"), also known as the Manzanita Band of Diegueño Mission Indians, is a federally recognized Self-Governance Indian Tribe that operates in accordance with its Constitution and Bylaws, adopted on July 12, 1975, pursuant to the Indian Reorganization Act, and approved by the Commissioner of Indian Affairs on January 9, 1976. The Tribe possesses inherent powers of self-governance with duties, rights, responsibilities, and power and authority over the lands within the exterior boundaries of the Manzanita Indian Reservation; and

WHEREAS: the Tribe has identified the need to develop a community air monitoring network to continuously detect air pollution on the Manzanita Reservation and inform the Tribal community during periods of poor air quality; and

WHEREAS: the Tribe is eligible to receive funding for developing an air monitoring project through the USEPA; and

WHEREAS: The Manzanita Tribe supports the scope of work for the Manzanita Enhanced Air Quality Monitoring Project that will implement a continuous air monitoring network to detect levels of PM 2.5, PM 10, ozone, and nitrogen dioxide throughout the Manzanita Reservation. A website and educational materials will be provided to inform the Tribal community how to reduce exposure to harmful air pollutants. Through this project, the Manzanita Tribe will gain technical capacity to improve its air quality monitoring capabilities and bolster resiliency for the Tribal community.

WHEREAS: the Manzanita General Council, as the recognized governing body of the Manzanita Tribe, authorizes the Executive Committee to apply for, negotiate, and contract with the U. S. Environmental Agency, subject to specific terms, conditions, and limitations of this resolution and applicable Tribal laws, codes, and regulations and further delegates responsibility to the Tribal Chairwoman as the designated Tribal official to execute the contract with the Bureau of Indian Affairs and to sign all necessary documents; and,

Manzanita Band of the Kumeyaay Nation

NOW THEREFORE BE IT RESOLVED that the Manzanita Tribe desires to develop an Enhanced Air Quality Monitoring Project for the Manzanita Reservation and approves and supports the submission of the Manzanita Enhanced Air Quality Monitoring Project to the U. S. Environmental Agency for the purposes of developing a community air monitoring network with supporting educational and workforce development activities.

CERTIFICATION

This is to certify that this Resolution NO: 22.06 was adopted a duly called meeting of the Manzanita Executive Committee, San Diego County, California, on the 14th day of March 2022 by a vote of 3 "yes", 0 "no" and 0 "abstaining." This Resolution NO: 22.06 shall stand until rescinded.

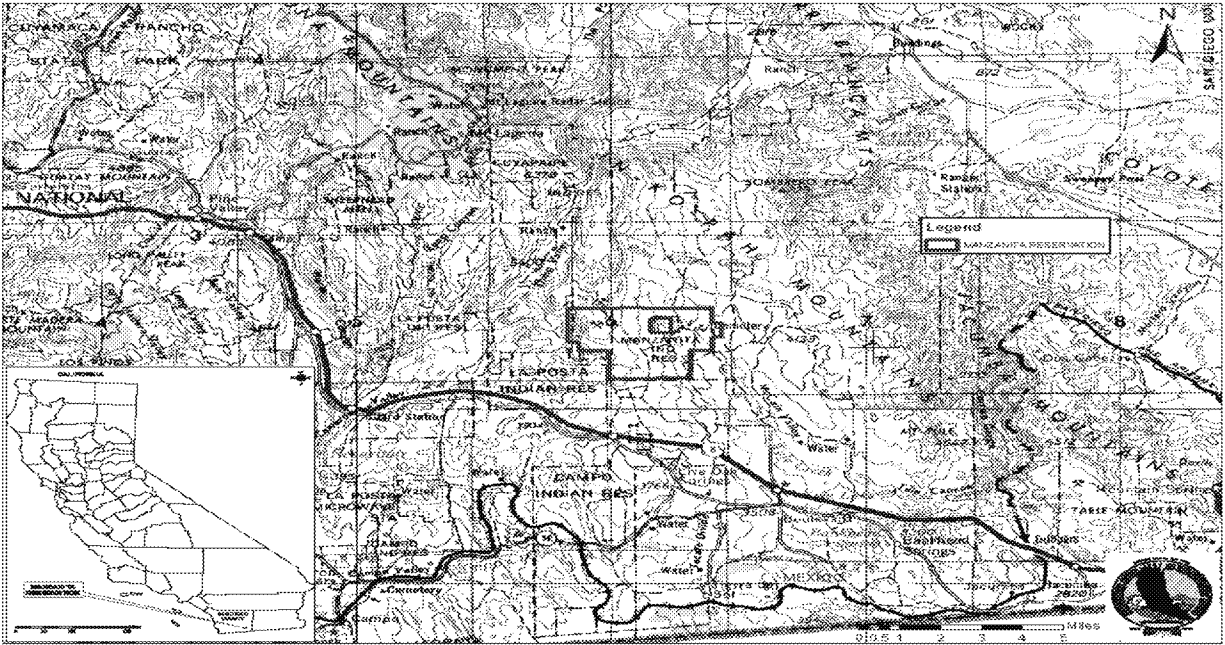

Angela Elliott Santos, Tribal Chairwoman


Janice Barnes, Secretary/Treasurer


John EagleSpirit Elliott, Committee Member


David Thompson, Committee Member





Manzanita Indian Reservation